



CENTER FOR TOXICOLOGY  
AND ENVIRONMENTAL HEALTH, LLC

**CTEH® Project #40442**  
**West Fertilizer Plant Explosion**  
**Summary of Air Monitoring Results**  
**April 24, 2013 07:00**

This data report discusses real-time air monitoring data collected between 4/23/2013 16:00 and 4/24/2013 04:00 in support of remediation operations conducted near the West Fertilizer Plant Explosion in West, TX.

Real-time air monitoring was conducted for VOCs, ammonia (NH<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), Percent of the lower explosive limit (LEL) and oxygen (O<sub>2</sub>) using remote-telemetry RAESystems® AreaRAEs.

Table 1 (Below) displays results for AreaRAE monitoring stations for this reporting period. Site maps and charts are available as attachments.

**Table 1**  
**Stationary AreaRAE Monitoring Stations Data Logged**  
**4/23/2013 16:00 to 4/24/2013 04:00**

Unit	Analyte	Count of Readings	Count of Detections	Average of Detections	Max Detection
<b>AR13</b>	LEL	2815	0	NA	< 1 %
	NH3	2815	0	NA	< 1 ppm
	NO2	2815	0	NA	< 0.1 ppm
	O2	2815	2815	20.9 %	20.9 %
	VOC	2815	0	NA	< 0.1 ppm
<b>AR14</b>	LEL	2878	0	NA	< 1 %
	NH3	2878	0	NA	< 1 ppm
	NO2	2878	0	NA	< 0.1 ppm
	O2	2878	2878	20.8 %	20.9 %
	VOC	2878	0	NA	< 0.1 ppm
<b>AR16</b> Mobile Down Wind Unit	LEL	2820	0	NA	< 1 %
	NH3	2820	0	NA	< 1 ppm
	NO2	2820	0	NA	< 0.1 ppm
	O2	2820	2820	20.9%	20.9 %
	VOC	2820	0	NA	< 0.1 ppm
<b>AR17</b>	LEL	2785	0	NA	< 1 %
	NH3	2785	0	NA	< 1 ppm
	NO2	2785	0	NA	< 0.1 ppm
	O2	2785	2785	20.7 %	20.9 %
	VOC	2785	0	NA	< 0.1 ppm
<b>AR18</b>	LEL	2639	0	NA	< 1 %
	NH3	2639	0	NA	< 1 ppm
	NO2	2639	0	NA	< 0.1 ppm
	O2	2639	2639	20.4%	20.6 %
	VOC	2639	0	NA	< 0.1 ppm

<sup>1</sup> The data in this table may include electronic drift. Drift is defined as any interference in the electrochemical sensor's ability to accurately report the concentration of a chemical in the atmosphere. Humidity and temperature changes throughout the monitoring period are typical sources of drift. Additionally, the data has not undergone complete QAQC as of this time.

# Appendix



## Air Monitoring Zone Classifications<sup>1</sup> April 24, 2013

Project: 40442  
Client: OMI  
City: West, TX  
County: McLennan

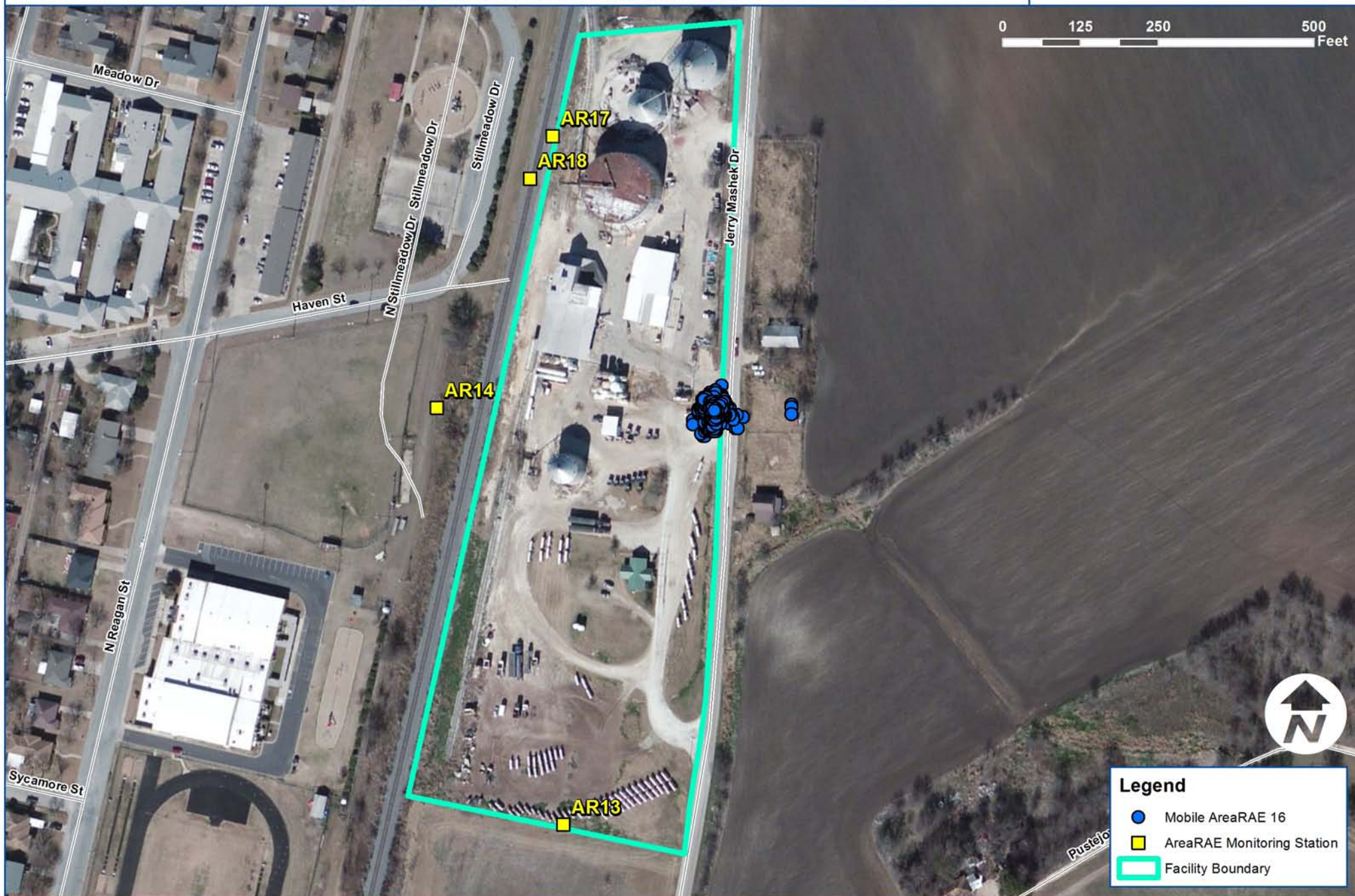




# AreaRAE Monitoring Station Locations

4/23/2013 16:00 to 4/24/2013 04:00

Project: 40442  
Client: OMI  
City: West, TX  
County: McLennan



## Legend

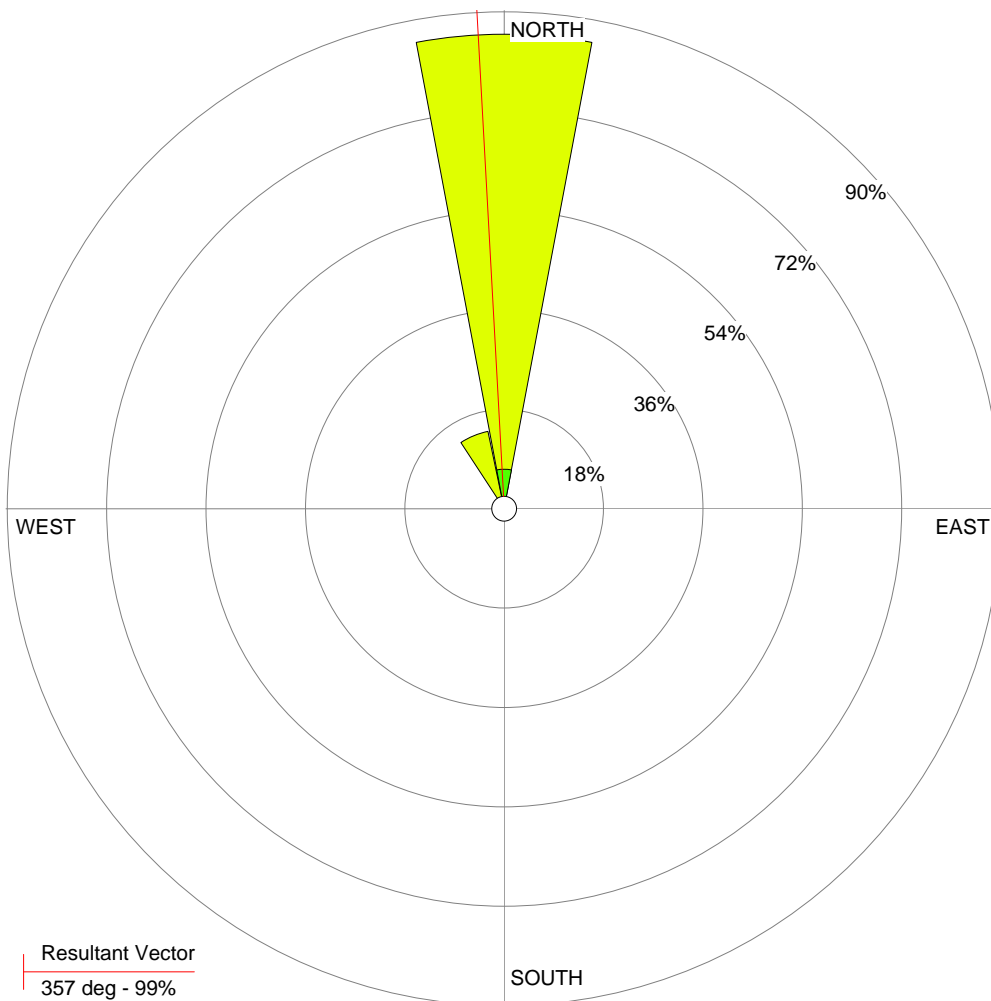
- Mobile AreaRAE 16
- AreaRAE Monitoring Station
- Facility Boundary

WIND ROSE PLOT:

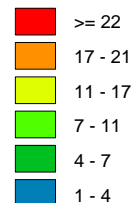
**Wind Speed and Direction 4/23/2013 16:00 to 4/24/2013 04:00**  
**West, Tx**

DISPLAY:

**Wind Speed**  
**Direction (blowing from)**



WIND SPEED  
(Knots)



Calms: 0.00%

COMMENTS:

Met Station: KACT Waco, TX

COMPANY NAME:

**CTEH**

MODELER:

**Jason Callahan**

CALM WINDS:

**0.00%**

AVG. WIND SPEED:

**14.36 Knots**



PROJECT NO.:

**40442 - OMI**